ABSTRACT

The present invention comprises an illumination portion (11), a light receiving portion (12), disposed in the surveying machine body (8), having an image sensor (27) for receiving a reflection light image (MO) of the measurement light, arithmetic means (38) for calculating a position in an area of the image sensor (27) for the reflection light image (MO) from a reflector (2), and a rotation mechanism for rotating the surveying machine body (8) so as to position the reflector (2) on a light receiving optical axis of the light receiving portion (12) based on the position obtained by the arithmetic means (38), and the light receiving portion (12) is provided with a light receiving sensor (47) having a smaller area than the area of the image sensor (27) on the light receiving optical axis in a conjugated position with the image area (27), and the arithmetic means (38) distinguishes the reflector 2 based on an output of the light receiving sensor (47).